The Wind Coalition

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The Wind Coalition (Coalition) is a non-profit association of wind developers, manufacturers and other entities interested in the development and promotion of wind energy as a clean, reliable, affordable, and infinite resource in the Southwest Power Pool and ERCOT regions of the United States.[1] The Coalition appreciates the opportunity to provide preliminary feedback to the Kansas Corporation Commission (KCC) staff in its effort to begin the process of developing rules for the implementation of House Bill 2369 and particularly the new Kansas Renewable Energy Standard (RES). If the new law is implemented properly, the RES will, among other things, encourage significant new investment in the state and provide important incentives for the attraction of new green energy jobs into Kansas. A properly implemented RES will enhance the development of the rich wind resources in the state for the benefit of and use by the people of Kansas. Wind energy provides protection for Kansas consumers against the volatility of fuel prices and future environmental costs of fossil fuels. The Coalition looks forward to working with the KCC and others interested in achieving the goal of developing the rich wind resources in Kansas for the benefit of Kansans.

The Coalition offers these comments as a starting point in the dialogue on the drafting of rules and regulations. The comments are focused on the RES and reflect the Coalition's understanding of the questions posed. Further discussion of the issues involved may affect the answers given in this document and the Coalition reserves the right to modify its comments and positions as the facts and issues become clearer.

The Coalition provides the following comments, to assist in making Kansas the "renewable energy capital of the world."[2] Additionally, we would highly recommend that the KCC consider holding informal workshops in which interested stakeholders and commission staff can brainstorm ideas using their respective expertise and breadth of experience.

Respectfully Submitted,

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cc: Frank Caro, Esq.

[1] Additional information about The Wind Coalition can be found at our website, www.windcoalition.org.
[2] "Trying to Catch the Wind" by Christine Metz, Lawrence Journal World June 19, 2009; quoting Kansas Governor Mark Parkinson.

Sec. 2

Sec. 2. (c):

- By whom should "net renewable generation capacity" be measured?

The measurement should be made by the utility and reported to the KCC pursuant to the rules of the Commission and subject to the Commission's review and audit.

- The definition of "net renewable generation capacity" in HB2369 appears to be the same as that used by the Southwest Power Pool for conventional generation resources. The separate SPP calculation for determining net capacity for wind generation is attached.

- Can the definition in the bill be applied to wind or other renewable generation? If so, how?

The definition does not appear to fit with renewable generation that relies upon intermittent resources. The range of possibilities extends from zero to nameplate.

- Would use of the separate SPP calculation for wind generation be inconsistent with the definition in the bill? In other words, is it legally permissible to include that different definition in rules and regulations?

The SPP definition does not appear to strictly satisfy the four hour test mentioned in the statute. However, an alternative like this may be needed in order to produce a reasonable measure of net renewable capacity. There should be discussion of other proxies such as those noted below. The choice of definition will have an important impact on the amount of renewable generation that is built in Kansas pursuant to this legislation. It is clear that arbitrarily picking a four hour period to measure the capacity of wind or solar generation is not a method of determining the level of effective capacity.

- If the SPP calculation for wind generation cannot be used for implementation of the bill, explain what calculation of the "net renewable generation capacity" of an existing wind turbine would be permissible and appropriate.

A proxy could be developed that would comply with the definition in the statute. One method would be to average the output of a wind or solar generation facility. A basis for the capacity could be an average of the output measured over a year and converted back to a capacity value, if the information is available. If no information is available, the capacity factor of the wind resources in the area of the facility as estimated by reliable wind studies done at the height of the turbines placed at the site could be used as a basis for measurement. Another method would be to utilize Effective Load Carrying Capacity (ELCC). ELCC calculations for wind can have a wide range, for example from 30% for the Colorado Green wind farm in Lamar, Colorado, to 23-25% in California to as low as 6% in Germany, depending not only on capacity factor but also on how closely wind patterns and wind plant output tend to match the system load (demand) profile. The ELCC would provide a proxy for capacity that factored in the load present and the wind resources available.

- Is there a permissible calculation method more appropriate for other (non-wind) renewable resources?

The SPP definition as contained in the statute may be sufficient to calculate some kinds/types of non-wind/solar resources, however, care should be taken to not assume that the fuel supply for such renewable generation makes additional analysis, such as that which may be done for wind and solar, unnecessary.

- How does "net renewable generation capacity" compare to name plate capacity?

Nameplate capacity is instantaneous and does not coincide with the output over a four hour period that is called for in the definition when applied to wind, solar and certain other renewable resources. The net renewable generation capacity (NRGC) should be smaller than the nameplate of the turbines concerned and should represent the capacity in a way that approximates the performance of traditional generation.

- What should be included in auxiliary power (is this just the parasitic load of the individual generators)?

The utility serving a renewable energy generation plant would install a meter to calculate the use of electricity at a plant if there is any such usage. The amount of power that would appear on that meter, if any, would be netted out.

Sec. 2. (d):

- Is there any ambiguity in the definition of "peak demand"? How should "peak demand" be calculated or determined?

There is no ambiguity in the definition, provided that such definition is meant to refer to an annual peak demand.

- By whom should "peak demand" be measured?

Peak demand is currently used by state commissions for other purposes. Whatever surrogate the KCC currently uses could be employed, subject to verification by the KCC, to measure peak demand.

- For purposes of implementing the bill, is FERC Form 1 peak demand data acceptable?

If FERC Form 1 data is currently accepted by the KCC in other proceedings, such as resource planning and prudence reviews, then it is acceptable in this situation.

Sec. 2. (e):

- Describe the approval criteria that should be used by the Kansas Corporation Commission to evaluate "renewable energy credits".

1. *Acceptability of the resource.*
2. *Means of measurement of the credit including changing energy values to capacity values.*
3. *Ensuring that the REC has not been counted toward another state's RES.*
4. *Tracking the actual energy generated from resources owned by or contracted for by a Kansas utility for purposes of REC compliance.*
5. *Developing the KCC geographic boundaries for Kansas RECs.*

- Should the Commission rely on the Green-e Organization (http://www.green-e.org/) or some other organization for certification of REC's?

As is done in other states, all renewable generators should be required to apply to the KCC for certification. The KCC can make the determination as to the generators eligibility based on the statutory requirements, using either internal resources or a third party consultant such as Clean Power Markets, Green-e, or others. Many states use internal resources to determine RPS eligibility.

Once a generator is certified by the KCC, RECs produced by that facility will be eligible for RPS compliance and should be tracked through an electronic REC tracking system similar to those used in other jurisdictions. The North American Renewables Registry is one such system that would work for REC tracking in Kansas (http://narenewables.apx.com/). The registry is designed by the same company (APX, Inc.) who designed the REC tracking systems used by states in other regions such as PJM, NEPOOL, WECC, and MISO.

- May the KCC legally defer to such organization? Would potential legal problems be addressed if the KCC provided a process that might allow a different conclusion on certification?

The KCC may not legally defer to such organization, but it can utilize it in making recommendations for final decision by the KCC. The ultimate determination of the qualification of a REC should be the KCC.

- Should the KCC do monitoring and verification in addition to the Green-e group or other organization?

Yes.

Sec. 2. (f):

- See questions under Section 7.

Sec. 3

Sec. 3. (a):

- What was the legislative intent for initially restricting use of renewable energy credits to 2011, 2016 and 2020? Should the commission allow the use of renewable energy credits in years other than 2011, 2016, and 2020? If that determination should be made later, what are the factors that should be considered?

The use of RECs in the statute is limited to bridging the initial compliance year's cycles. By specifying these specific years of compliance, the bill makes clear that RECs will not be the measuring device for compliance. In many other states, the energy that qualifies is limited by definition in fuel source and in location of the generation or delivery of the energy and the measurement of compliance is measured through a universe of RECs that represent that qualified renewable energy. In those states, the goal should be to increase the value of RECs created and make them marketable over a broad area. This is not the way RECs are intended for use in Kansas. Here RECs are not being used to quantify the energy sold to Kansas's customers but only to represent energy not owned or contracted for by the utility . This energy after being mathematically converted to capacity, may then be used in a limited way during the three years spelled out in the statute to fill in the difference between a utilities net renewable capacity and the RES requirement. The Wind Coalition believes that such RECs in those three years should not be allowed to be counted toward the RES unless:

A. The REC represents capacity that is owned or under a PPA by another Kansas utility that exceeds that needed by that utility to meet its requirements under the Kansas RES; or

B. The REC is from another source other than a Kansas utility and the utility in question cannot meet its RES requirement because of a force majeure event or using RECs is the only means by which compliance to the RES can be met in that year without eclipsing the one percent rate impact.

The KCC should further consider additional limits to Kansas RECs to avoid giving utilities the incentive to buy energy RECs in areas not in proximity to Kansas instead of acquiring renewable capacity such as:

1. *Limiting the geographic location of the generation or require energy to be serving the utilities load in Kansas.*

2. *Limiting the percentage of energy RECs that could be used in a year.*

3. *Limiting the use of RECs to that needed to meet both the RES and the requirements of Section 5.*

4. *Prohibiting the use of RECs and the energy they represent from being used to meet requirements in multiple states.*

There is a particular concern dealing with utilities that operate in more states than Kansas. For instance the RECs and the energy they represent used to satisfy the Kansas RES should not be allowed to be used to meet the Missouri requirement. The KCC should clearly prohibit a scenario where a Kansas utility showed the capacity of a wind farm as being for the satisfaction of the Kansas RES but showed the energy from that resource being used to meet the Missouri RES. Since one is capacity and the other is energy it is perhaps more complicated than the problem created by the use of RECs to satisfy one RES and the energy it represents satisfying another RES. One possible solution might be to convert the energy sold to Missouri customers to capacity and subtract that from the capacity given credit in Kansas.

The KCC may wish to give consideration to a conversion of measurement from capacity to energy while keeping the basic premise of capacity in the implementation of the RES. Texas also has a capacity based RES but changed the measurement of RECs from capacity to energy to increase the marketability of the RECs. The KCC may want to consider a similar approach.

- If the commission does allow the use of "credits" during the off years, under what conditions and limitations should the commission allow the use of the "credits"?

RECs should only be used in the years named in the statute. We believe that this is clearly the legislative intent.

- There does not appear to be any explicit provisions for addressing capacity with regard to energy purchased from renewable energy resources – how should such capacity be determined or calculated?

The conversion of energy to capacity should be done and then added to the capacity required for that year. Capacity from energy purchased from renewable energy resources should be determined in a similar manner as it is determined for utility owned projects in order to avoid confusion or the possibility of giving one an advantage over the other. The energy should not be counted if the RECs associated with it have been used to satisfy another states RES.

The bill provides that the actual capacity factor from the utility's owned renewable generation from the prior calendar year should be applied to REC's for determining their capacity. What if a utility has no owned renewable generation from the immediately previous calendar year?

One approach might be to use the latest wind resource maps for the area at the height of the turbine for a proxy or to the extent data is available use the capacity determined for other existing wind farms within a given distance from the farm in question. Another is found in the SPP document on wind capacity.

Also, does it make any difference if the generation represented by the credits and the owned renewable generation are different types of generation (solar and wind generation) so that the capacity factors are substantially different?

Yes. The conversion should reflect the capacity factor for the resource or at a minimum for the type of resource.

Sec 3. (b):

- What reporting requirements should the commission impose with regard to tracking "all power sold to Kansas retail customers"?

This should be done in the manner that is currently employed in rate cases.

- Should the commission audit this data to ensure that it is reasonably correct?

Yes.

Sec 3. (c):

Does the reference to eligible capacity in Kansas installed after January 1, 2000, only mean a utility's own generation or does it include REC's, resources from energy that is purchased and/or net metered systems?

Existing PPAs should also be allowed the additional credit.

Sec. 4

Should the Commission include in rules and regulations standards with regard to utility recovery of reasonable costs incurred to meet the requirements of this bill or should it rely on traditional processes for determining the prudence and reasonableness of costs?

The recovery of reasonable and prudent costs should be allowed and reviewed. The utility should be allowed an Accounting Authority Order for the tracking of expenses between rate case or be allowed pass-through in their fuel clauses in the case of a PPA.

If standards should be included in the rules and regulations, what should they be?

An RFP process should be implemented. The recovery of costs should be done on the same basis as other costs necessary to the delivery of service to Kansas's ratepayers.

Sec. 5

With regard to investment in renewable energy resources, this section refers to both increases increase in the utility's "total revenue requirement" and to "retail rate impact."

- How should the "revenue requirement" and "total retail rates" to be used as the base case be determined?

The Wind Coalition will provide more input on this in the future but reserves comment on this issue at this time.

- How should Purchased Power from renewable resources be factored into any revenue requirement or total retail rate impact? For example, if the Purchased Power flows through a utility's ECA mechanism, is the amount used as an input to retail rate impact but not a revenue requirement impact?

All expenses that flow through a fuel adjustment or other rider should be factored in. It must be used for both or it would not be consistent and the benefits of having no fuel costs will not be reflected in the comparison to carbon based resources.

- If a revenue requirement increase is used, what inputs should be used to determine the increases; e.g. ROR, ADIT, depreciation?

The Wind Coalition reserves comment on this issue at this time.

- If a retail rate impact is used, how should the percentage increase be determined and what inputs should be considered?

The Wind Coalition reserves comment on this issue at this time.

- Should the data used for inputs in a revenue requirement increase or retail rate impact come from a utility's last rate case? If so, what details need to be included in any settlement agreement resulting from the last rate case?

The Wind Coalition reserves comment on this issue at this time.

- This section requires that rate impact shall be determined "net of new nonrenewable alternative sources of electricity supply reasonably available at the time of determination." What is contemplated by this?

This is clearly a forward looking analysis comparing the meeting of the load requirements in future years under the RES to having the load served with nonrenewable generation. The KCC must answer a number of questions regarding the calculation of this forward-looking rate impact analysis. This analysis should allow for a longer planning horizon to allow adequate time for planning to take into account the RES requirements. It should acknowledge that utilities do resource plans 10-20 years into the future. The KCC needs to clearly state that utilities are to comply with the RES percentage renewable requirement in the longer-term resource planning process. The failure to do so could result in overbuilding generation and increase the likelihood that the rate impact provision will be affected.

Should one of the following determinations of an alternative source be used:

- A new source that would be supported by a least cost integrated resource plan.
- A new source that is the least costly nonrenewable, even if not required by capacity reserve or energy demand needs.

The latter (i.e., least costly nonrenewable, even if not required). Appropriate modeling must be done for fuel and environmental costs.

- How should the cost and impact on rates of the alternative resource be determined; especially in the absence of a full dispatch cost model?

If the utility maintains that it may avoid the penalties for RES noncompliance then the utility should submit model runs that have appropriate assumptions and scenarios for the Commission's review and hearing.

Sec. 6

- What reporting schedule should the commission impose upon the utilities? Quarterly? Annually?

Reporting should be done annually.

- What information should be contained within the reports?

Sufficient detail should be included to allow the KCC to fully evaluate the compliance of the utility with the RES.

- Should the rules and regulations set forth guidelines for determining administrative penalties? If so, what should they be and what level of penalties is necessary to promote compliance with the bill?

Penalties for noncompliance should be sufficient to ensure compliance.

- How can the Commission structure a fine for a cooperative without its Kansas retail customers/owners paying the fine?

This topic needs further exploration. The Wind Coalition reserves comment on this issue at this time.

- Should the Commission rules and regulations attempt to address what would be mitigating circumstances?

Rules should be developed to flesh out the meaning of this section.

- If so, what should be the criteria or guidelines to determine such mitigating circumstances?

The mitigating circumstances should be narrowly defined and limited to events that are clearly outside of the control of the utility.

Sec. 7

- How should the Commission rules and regulations provide for certification of renewable energy sources under Sec. 2. (f)(11)?

This section should be limited to new energy sources that were not available prior to the sections effective date. The energy sources should be consistent with those that are included in the list of renewable resources explicitly listed in the legislation.

- Should and may the KCC rely on certification by the Green-e Organization or some other entity?

No. The KCC may wish to use another entity as a screen of qualifying RECs but the final determination of what qualifies as a Kansas REC should be up to the KCC.

- If the KCC should not or cannot defer to another organization, what standards should be included in Commission rules and regulations? Why and how should they differ from the Green-e standards: (http://www.green-e.org/docs/energy/Appendix%20D_Green-e%20Energy%20National%20Standard.pdf)

The Kansas requirements should be for the qualification of Kansas RECs as stated above should be set forth in the KCCs rules and regulations.

⇒ Even if the KCC defers generally to the certification of an entity like Green-e, should the Commission reserve the right to make its own determinations, especially in situations requiring case-by-case review under those standards, e.g. co-firing of bio-mass with non-renewables.

The KCC should ensure that RECs qualify under Kansas's statutes and rules and comply with the intent of the legislature.

- What criteria should the Commission use for renewable energy resource certification besides "fuel type, technology, and the environmental impacts of renewable energy resources"?

Other criteria should include, but not be limited to, geographic limitations, the calculation of the value for purposes of appropriate valuation of energy to a capacity resource, and ensuring that the RECs are not used in multiple states.

- How should the Commission ensure that no "undue or adverse air, water, or land use impacts" are caused by "use of renewable energy resources"? Specifically,

    - What are undue or adverse impacts, especially for land use?
    - Does this require an "Environmental Impact Study"?
    - What should be the role of the Kansas Department of Health and Environment in implementing this requirement?

Projects built in Kansas would already have the appropriate approvals under Kansas law and would have obtained any necessary legal authority from state and local officials. Therefore this analysis should have previously been completed. Such zoning and land use issues should be determined and addressed by local and county officials, if determined necessary.